

**ABSTRACT**

A method for preventing the scale of a circuit from being extended and for preventing noise from being generated by a simultaneous value change in output buffers includes: the  
5 first process of checking the number of output buffers 15A through 15D whose output values change when boundary scan cells 13E through 13H output input patterns; the second process of checking the noise value generated by the change in the output values when all output values from the output  
10 buffers checked in the first process change; the third process of selecting the output buffer from the buffers checked in the first process such that the noise value checked in the second process can be within the noise allowable value; and the fourth process of outputting as a test pattern a  
15 pattern obtained by amending the input pattern such that the output value of the output buffer selected in the third process can change.